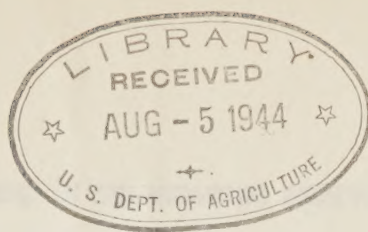


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A LABORATORY DEVICE FOR SUPPLYING LIQUIDS TO ADULT INSECTS

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In the writer's life-history studies of the raisin moth, Ephestia figulilella Gregson, in the dried-fruit insect laboratory at Fresno, Calif., it was early noted that the number of eggs laid per female was increased and the length of life of both sexes prolonged if the adults used were supplied with either water or sugar solution. The major difficulty encountered in attempting to supply this need was the fact that, when various methods of affording liquid food were used, the moths became entangled in the fluid; then, in attempting to fly about their containers, their wings stuck to the glass or celluloid and they shortly died.

The drinking cup finally devised eliminates the possibility of the insects themselves getting wet, yet provides a readily available supply of liquid. This cup is fashioned from a section of $\frac{1}{8}$ -inch bore glass tubing, $\frac{3}{8}$ inch long, one end of which is fused and rounded over a flame, thus forming a miniature receptacle. When in use, the cup is inserted in a large raisin so that the open end is flush with the surface. With the mouth of the cup upward, it may be filled with an ordinary medicine dropper, the glass of which is drawn out into a capillary tube.

The liquid cannot be spilled out of the cup since, in a tube of such small size, the interfacial tension of glass and fluid is sufficient to prevent it. A moth will feed readily from such a container by thrusting its proboscis into the opening of the cup; yet, owing to the small size of this opening, its body is kept entirely free of the liquid within.

